AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) Process for manufacturing a Micro-Electro-Mechanical-System (MEMS) comprising the use of a sacrificial layer characterized by the fact that the sacrificial layer is made of silicon.

2. (Currently Amended) Process according to ~~the~~ claim 1 wherein the silicon sacrificial layer is removed by plasma etching with fluorine-based chemistry.

3. (Original) Process according to claim 1 wherein the silicon sacrificial layer is removed by xenon difluoride (XeF2) or bromine trifluoride (BrF3) etching.

4. (Original) Process according to claim 1 wherein the silicon is in polycrystalline form.

5. (Original) Process according to claim 1 wherein the silicon is in amorphous form.

6. (Previously Presented) Process according to claim 1 characterized by the fact that it is used in surface micromachining.

7. (Previously Presented) Process according to claim 1 characterized by the fact that it is used for the manufacture of a MEMS containing a suspended metal layer.

8. (Previously Presented) MEMS device architecture obtained according to the process as defined in claim 1.

9. (Previously Presented) MEMS device according to claim 8 to be fabricated on silicon, silicon-on-insulator substrates and on silicon with the underneath substrate etched.

10. (Previously Presented) MEMS device according to claim 8 characterized by the fact that it comprises a suspended metal gate.

11. (Previously Presented) MEMS device according to claim 10 characterized by the fact that it is a suspended gate MOSFET.

12. (Previously Presented) MEMS device according to claim 10 wherein said metal is aluminum, AlSi, AlSiCu, copper, gold, tungsten, platinum, titanium or a combination of these metals.

13. (Previously Presented) MEMS device architecture obtained according to the process as defined in claim 1 and using two metal levels, one fixed and one movable, called membrane, both capped with one insulator, with variable air-gaps and an underlying insulator deposited on a semiconductor substrate.

14. (Previously Presented) MEMS device according to claim 13 characterized by the fact that it comprises a high-k dielectric made of TiO2.

15. (Original) Use of the device of claim 10 as radiofrequency capacitive switch.

16. (Original) Use of the device of claim 10 as current switch.

17. (Original) Use of the device of claim 10 as radiofrequency tuneable capacitor.

18. (Original) Use of the device of claim 10 as magnetic field sensor.

19. (Original) Use of the device of claim 10 as accelerometer.

20. (Original) Use of the device of claim 10 as pressure sensor.